UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,513	12/20/2007	Torben Melsen	P18557US1	7479

27045   7590   12/16/2009
ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER
HARLEY, JASON A

ART UNIT	PAPER NUMBER
2468	

MAIL DATE	DELIVERY MODE
12/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 December 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-18</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-18</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>15 June 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/15/06</u>.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

This communication is in response to the application filed on 12/02/07 in which claims 1

-18 are presented for examination.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1, 4, 10, 13 are rejected under 35 U.S.C. 102(e) as being anticipated by

Owens et al. U.S. PG Pub No. (2003/0039244).

As to claim 1, Owens teaches an Ethernet Digital Subscriber Line Access Multiplexer

(DSLAM) for providing dynamic service selection and end-user configuration of service

bindings in a digital communication system, said Ethernet DSLAM comprising: means

for receiving login credentials and a service request from an end-user device; means for

authenticating the login credentials through an authentication server; means for

receiving from the authentication server (Owens, par 0050, 0051). The paragraph

shows a point to point protocol Ethernet network using DSLAM to provide a service

having a means for receiving a user identifier or passwords through a server for

authentication.

Owens show a plurality of attributes for configuring the Ethernet DSLAM to

provide a service binding corresponding to the requested service, said attributes

including an identification of an access network for the requested service, and an

identification of a Permanent Virtual Circuit (PVC) on a local DSL loop associated with

the end-user device (par 0005, 0006, 0047). The paragraphs show identifying a user's

identification of a local area network and PVC on DSL.

Owens also show means for training a bridging network terminal (NT) having a

plurality of PVCs to utilize the identified PVC for sending upstream traffic from the end-

user terminal to the Ethernet DSLAM, said training means including means for sending

initial downstream traffic from the Ethernet DSLAM to the end-user device utilizing the

identified PVC (par 0006, 0012-0017, 0040). The paragraphs show bridging a terminal

to PVCs to utilize upstream and downstream traffic.

As to claim 4, Owens conveys the Ethernet DSLAM of claim 1, wherein the means for

authenticating includes a RADIUS client that communicates with an external RADIUS

authentication server (Owens, par 0047, 0048). The paragraph shows the

authentication servers use Radius for communication which use shown to separate or
as a single server.

As to claim 10, Claim 10 is a claim to a method to carry out the DSLAM of claim 1.
Therefore claim 10 is rejected under the same rationale set forth in claim 1.

As to claim 13, Claim 13 is a claim to a method to carry out the DSLAM of claim 4.
Therefore claim 13 is rejected under the same rationale set forth in claim 4.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 2, 3, 5-9, 11, 12, 14-18 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Owens et al. U.S. PG Pub No. (2003/0039244) in view of Holmgren
et al. U.S. Patent No. (7,277,442).

As to claim 2, Owens describes the Ethernet DSLAM of claim 1, wherein the end-user device has a Media Access Control (MAC) address (par 0052). Owens show where the device has a MAC address using DSLAM, and Owens fails to show the requested service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to the MAC address for the end-user device.

In analogous art Holmgren show the requested service is accessed through a Service Virtual Local Area Network (S-VLAN), and the Ethernet includes means for mapping the S-VLAN for the requested service to the address for the end-user device (Holmgren, col 1, ln 6-9, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is accessed though an S-VLAN and where the Ethernet network includes mapping a service to an address.

At the time of the invention it would have been obvious to one of ordinary skill in the art to combine the invention it would have been obvious to one of ordinary skill in the art to combine the teachings of Owens and Holmgren because a way of conserving mapping assignments for internetworking Ethernet and ATM networks by mapping VLAN identifiers to PVCs.

As to claim 3, Owens presents the Ethernet DSLAM of claim 1, wherein the means for receiving login credentials and a service request from an end-user device includes an

Ethernet DSLAM (par 0051). The paragraph shows a point to point protocol Ethernet

network using DSLAM. Owens fails to show User Virtual Local Area Network (U-VLAN)

through which the Ethernet communicates with the end-user device, and the requested

service is accessed through a Service Virtual Local Area Network (S-VLAN), and the

Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to

the U-VLAN for the end- user device.

In an analogous art Holmgren show User Virtual Local Area Network (U-VLAN)

through which the Ethernet communicates with the end-user device, and the requested

service is accessed through a Service Virtual Local Area Network (S-VLAN), and the

Ethernet DSLAM includes means for mapping the S-VLAN for the requested service to

the U-VLAN for the end- user device (Holmgren, col 5, In 39-55). The column shows a

customer VLAN which the Ethernet communicates with to map SVLAN to the customer

VLAN.

At the time of the invention it would have been obvious to one of ordinary skill in

the art to combine the invention it would have been obvious to one of ordinary skill in

the art to combine the teachings of Owens and Holmgren because a way of conserving

mapping assignments for internetworking Ethernet and ATM networks by mapping

VLAN identifiers to PVCs.

As to claim 5, Owens illustrates an Ethernet Digital Subscriber Line Access Multiplexer

(DSLAM) or providing dynamic service selection and end-user configuration of service

bindings in a digital communication system, said Ethernet DSLAM comprising: a

plurality of subscriber ports for receiving login credentials and service requests from

end-user devices, and for communicating data traffic to and from the end-user devices,

wherein an identified subscriber port communicates with an identified end-user device

(Owens, par 0049-0051). The paragraph shows a point to point protocol Ethernet

network using DSLAM to provide a service having a means for receiving a user

identifier or passwords through a server for authentication.

Owens show a RADIUS client that sends login credentials and a service request

from the identified end-user device to an external RADIUS server for authentication and

receives from the external RADIUS server, a plurality of attributes for configuring the

Ethernet DSLAM to provide a service binding corresponding to the requested service,

and an identification of a Permanent Virtual Circuit (PVC) on a local DSL loop

associated with the end-user device a Service Selection Controller that receives the

attributes from the RADIUS client (par 0005, 0006, 0044, 0049, 0051). From the

applicant's specification the service selection controller is located in side the DLSAM.

The paragraph shows the authentication servers use Radius for communication and

configuring and communicating with an Ethernet DSLAM to provide identification for

PVCs on DSL.

Owens fails to show a traffic mapper that maps data traffic between a plurality of

Service Virtual Local Area Networks (S-VLANs) and the subscriber ports; said attributes

including an identification of an S-VLAN through which the requested service is

accessed and sends mapping control information to the traffic mapper, thereby enabling

the traffic mapper to establish a service binding between the identified end-user device

and the S- VLAN through which the requested service is accessed.

In an analogous art Holmgren show a traffic mapper that maps data traffic

between a plurality of Service Virtual Local Area Networks (S-VLANs) and the

subscriber ports; said attributes including an identification of an S-VLAN through which

the requested service is accessed and sends mapping control information to the traffic

mapper, thereby enabling the traffic mapper to establish a service binding between the

identified end-user device and the S- VLAN through which the requested service is

accessed (Holmgren, col 1, ln 6-34, col 4, ln 39-50, col 5, ln 45-50). It is shown where a

service is accessed though an S-VLAN, which is also shown to communicate through

an Ethernet network to access Vans on a per port basis, and it is shown where the

Ethernet network includes mapping a service to an address.

At the time of the invention it would have been obvious to one of ordinary skill in

the art to combine the invention it would have been obvious to one of ordinary skill in

the art to combine the teachings of Owens and Holmgren because a way of conserving

mapping assignments for internetworking Ethernet and ATM networks by mapping

VLAN identifiers to PVCs.

As to claim 6, Owens and Holmgren define the Ethernet DSLAM of claim 5, wherein

the service binding is established utilizing the IEEE802. I x protocol. From applicants

specification IEEE802. I x is an integrated part of Windows XP operating system

(Owens, par 0015). The paragraph shows using Windows operating system.

As to claim 7, Owens and Holmgren create the Ethernet DSLAM of claim 5, wherein

the service binding is established utilizing the Point-to-Point Protocol over Ethernet

(PPPoE) protocol (Owens, par 0008). It is shown utilizing Point-to-Point Protocol over

Ethernet.

As to claim 8, Owens and Holmgren expose the Ethernet DSLAM of claim 5, further

comprising a Dynamic Host Configuration Protocol (DHCP) server that answers DHCP

requests sent by the identified end-user device prior to establishment of the service

binding, said DHCP server sending a temporary configuration and a short lease time to

the identified end- user device (par 0019, 0088, 0090). The paragraph shows using a

DHCP server establishing a temporary configuration and having a lease time to

authenticate a user.

As to claim 9, Owens and Holmgren explain the Ethernet DSLAM of claim 8, wherein

the DHCP server ignores DHCP requests sent by the identified end-user device after

establishment of the service binding, thereby forcing the end-user device to broadcast a

DHCP discover message which is passed on to a second DHCP server in the through

which the requested service is accessed (Owens, par 0055, 0063, 0065). The

paragraphs show sending a broadcast of discover message by a DHCP server.

Owens fails to show using SVLAN. In analogous art Holmgren shows using

SVLAN (Holmgren, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is

accessed though an S-VLAN

At the time of the invention it would have been obvious to one of ordinary skill in

the art to combine the invention it would have been obvious to one of ordinary skill in

the art to combine the teachings of Owens and Holmgren because a way of conserving

mapping assignments for internetworking Ethernet and ATM networks by mapping

VLAN identifiers to PVCs.

As to claim 11, Claim 11 is a claim to a method to carry out the DSLAM of claim 2.

Therefore claim 11 is rejected under the same rationale set forth in claim 2.

As to claim 12, Claim 12 is a claim to a method to carry out the DSLAM of claim 2.

Therefore claim 12 is rejected under the same rationale set forth in claim 2.

As to claim 14, Claim 14 is a claim to a method to carry out the DSLAM of claim 5.

Therefore claim 14 is rejected under the same rationale set forth in claim 5.

As to claim 15, Claim 15 is a claim to a method to carry out the DSLAM of claim 6.

Therefore claim 15 is rejected under the same rationale set forth in claim 6.

As to claim 16, Claim 16 is a claim to a method to carry out the DSLAM of claim 7.

Therefore claim 16 is rejected under the same rationale set forth in claim 7.

As to claim 17, Claim 17 is a claim to a method to carry out the DSLAM of claim 8.

Therefore claim 17 is rejected under the same rationale set forth in claim 8.

As to claim 18, Owens and Holmgren demonstrate the method of claim 14, further

comprising the steps of: receiving by the Ethernet DSLAM, a Dynamic Host

Configuration Protocol (DHCP) request from the identified end-user device; determining

by the Ethernet DSLAM, whether the service binding has been established; upon

determining that the service binding has not been established, sending an answer to the

end-user device from a DHCP server in the Ethernet DSLAM (Owens, fig 1, par 0019,

0051, 0052, 0074). The paragraphs show using a DSLAM server to serve and receive

DHCP request and determining that the service whether or not service has been

established.

Owens show wherein the answer includes a temporary configuration and a short

lease time; and upon determining that the service binding has been established,

ignoring the DHCP request, thereby forcing the end-user device to broadcast a DHCP

discover message which is passed on to a second DHCP server through which the

requested service is accessed (par 0019, 0055, 0063, 0065, 0088, 0090). The

paragraph shows using a DHCP server establishing a temporary configuration and

having a lease time to authenticate a user, and sending a broadcast of discover

message by a DHCP server

Owens fails to show using SVLAN. In analogous art Holmgren shows using

SVLAN (Holmgren, col 4, ln 39-50, col 5, ln 45-50). It is shown where a service is

accessed though an S-VLAN

At the time of the invention it would have been obvious to one of ordinary skill in

the art to combine the invention it would have been obvious to one of ordinary skill in

the art to combine the teachings of Owens and Holmgren because a way of conserving

mapping assignments for internetworking Ethernet and ATM networks by mapping

VLAN identifiers to PVCs.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jason Harley whose telephone number is (571)270-

5435. The examiner can normally be reached on Monday- Friday 7:00 am-4:30pm

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Ryman can be reached on (571)272-2468. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JH

/Melanie Jagannathan/
Primary Examiner, Art Unit 2468